OM protein - protein search, using sw model

Run on: May 30, 2002, 17:22:30 ; Search time 30.05 Seconds
(without alignments)
413.986 Million cell updates/sec

Title: US-09-730-617-4
Perfect score: 568
Sequence: 1 MFGSLLHFALLAAGVVPLSW.....LSRPAPQIQYRRLLVQILQK 112

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 747574 seqs, 111073796 residues

Total number of hits satisfying chosen parameters: 747574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_032802:*
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21: /SIDS1/gcgdata/hold-geneseq/geneseqp-embl/AA2000.DAT:*
22: /SIDS1/gcgdata/hold-geneseq/geneseqp-embl/AA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	568	100.0	112	22	AAB84997	Human novel neurem
2	459	80.8	121	22	AAB48078	Human extracellula
3	161	28.3	32	16	AAW64915	Neuromedin B pepti
4	152	26.8	32	22	AAB91375	Tachykinins peptid
5	145	25.5	30	22	AAB91374	Tachykinins peptid
6	81	14.3	190	22	AAU43382	Propionibacterium
7	76.5	13.5	119	16	AAR74034	Bombesin-related p
8	75.5	13.3	517	22	ABG22331	Novel human diagno
9	73.5	12.9	473	17	AAR88502	Protein sequence f
10	73.5	12.9	473	19	AAW77413	Maize male fertili
11	73.5	12.9	473	20	AAW30612	Zea mays male fert
12	73.5	12.9	473	20	AAW90062	Maize MS45 protein
13	73.5	12.9	473	22	AAG67264	Amino acid sequenc
14	73.5	12.9	969	22	ABG29063	Novel human diagno
15	72.5	12.8	148	22	AAM85555	Human immune/haema
16	72	12.7	1355	22	ABG23028	Novel human diagno
17	71.5	12.6	671	22	ABG17058	Novel human diagno
18	71.5	12.6	1003	22	ABG23021	Novel human diagno
19	71.5	12.6	1235	22	ABG17056	Novel human diagno
20	71.5	12.6	1270	22	ABG17063	Novel human diagno
21	71.5	12.6	1614	16	AAR75917	Polycystic kidney
22	71.5	12.6	1614	17	AAR87538	Polycystic kidney
23	71.5	12.6	4292	22	ABG17060	Novel human diagno
24	71.5	12.6	4302	17	AAW00870	Polycystic kidney
25	71.5	12.6	4302	19	AAW33396	Human PKD1 polypep
26	71.5	12.6	4302	19	AAW23830	Human PKD1 protein
27	71.5	12.6	4302	21	AAY92719	Human polycistin.
28	71.5	12.6	4303	17	AAR90302	Polycystic kidney
29	71.5	12.6	4303	21	AAY95558	Human polycystin-1
30	71.5	12.6	4339	16	AAR75916	Polycystic kidney
31	71.5	12.6	4339	17	AAR87539	Polycystic kidney
32	69	12.1	145	22	AAG70734	S cerevisiae apopt
33	68.5	12.1	401	21	AAG05859	Arabidopsis thalia
34	68.5	12.1	402	21	AAG05858	Arabidopsis thalia
35	68.5	12.1	414	21	AAG05857	Arabidopsis thalia
36	68.5	12.1	643	22	ABB11071	Human polycystic d
37	68	12.0	181	19	AAW39181	Human PKD1 protein
38	67	11.8	15281	15	AAR44929	T. niveum Cyclospo
39	66.5	11.7	323	21	AAB50381	Human uncoupling p
40	66.5	11.7	323	22	AAB94434	Human protein sequ
41	66.5	11.7	650	22	AAG90102	C glutamicum prote
42	66.5	11.7	756	21	AAY81394	Rat phospholipase
43	66	11.6	3313	22	AAU30134	Novel human secret
44	66	11.6	4725	22	ABG23837	Novel human diagno
45	66	11.6	4977	22	ABG17057	Novel human diagno

ALIGNMENTS

RESULT 1
AAB84997
ID AAB84997 standard; Protein; 112 AA.
XX
AC AAB84997;
XX
DT 06-AUG-2001 (first entry)
XX
DE Human novel neuremedin (NOVNEUR) peptide.
XX
KW NOVX; transmembrane protein; NOVTRAN; neuromedin peptide; NOVNEUR;
KW gonadotropin-like protein; NOVGON; interleukin-1; NOVINTRA; human;
KW cytostatic; neuroprotective; reproductive; antiinflammatory; cancer;
KW antibacterial; cerebroprotective; antidiabetic; antiarthritic;
KW antiasthmatic; antiallergic.
XX
OS Homo sapiens.
XX
PN WO200140291-A2.
XX
PD 07-JUN-2001.
XX
PF 06-DEC-2000; 2000WO-US33029.
XX
PR 06-DEC-1999; 99US-0169056.
PR 09-DEC-1999; 99US-0169866.
PR 09-DEC-1999; 99US-0169886.
PR 10-DEC-1999; 99US-0170252.
PR 12-JAN-2000; 2000US-0175740.
PR 05-DEC-2000; 2000US-0170252.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Burgess CE, Prayaga SK, Shimkets RA, Rastelli L, Zerhusen BD;

```
PI   Mezes PS;
XX
DR   WPI; 2001-374790/39.
DR   N-PSDB; AAF83866.
XX
PT   Novel isolated human transmembrane, neuromedin peptide
PT   gonadotropin-like protein and interleukin-1 receptor antagonist
PT   proteins, useful for treating cancer, immune response disorder,
PT   metabolic function disorders -
XX
PS   Claim 1; Fig 3B; 138pp; English.
XX
CC   The invention provides novel polypeptides (NOVX) selected from human
CC   transmembrane protein (NOVTRAN), neuromedin peptide (NOVNEUR),
CC   gonadotropin-like protein (NOVGON) and two interleukin-1 receptor
CC   antagonist proteins (NOVINTRA A and B). The invention also provides
CC   methods in which a NOVX polypeptide, polynucleotide and antibody are
CC   used in the detection, prevention and treatment of a broad range of
CC   pathological states. NOVTRAN can be used to treat is a cell signaling
CC   disorder such as cancer, immune response disorder, hematopoietic
CC   disorder, neurodegenerative disorder. NOVNEUR can be used to treat
CC   endocrine disorder, muscle disorder, neurologic disorder, cancers of
CC   central nervous system, breast, colon, ovary, kidney, prostate and
CC   thyroid. NOVGON can be used to treat reproductive development disorder,
CC   metabolic function disorder and melanoma. NOVINTRA A and B can be used
CC   to treat bone metabolism or structure disorder, inflammatory response
CC   disorder, immune regulation disorder, septic shock, stroke, diabetes,
CC   arthritis and cancer. The present sequence represents the NOVNEUR
CC   polypeptide.
XX
SQ   Sequence   112 AA;


  Query Match             100.0%;  Score 568;  DB 22;  Length 112;
  Best Local Similarity   100.0%;  Pred. No. 8.7e-57;
  Matches  112;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 MFGSLLHFALLAAGVVPLSWDLPEPRSRASKIRVHSRGKLWAIGHFMGKKSLEPSSPSPL 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 mfgsllhfallaagvvplswdlpeprsraskirvhsrgklwaighfmgkkslepsspspl 60

Qy      61 GTAPHTSLRDQRLQLSHDLLGILLLKKALGVSLSRPAPQIQYRRLLVQILQK 112
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 gtaphtslrdqrlqlshdllgilllkkalgvslsrpapqiqyrrllvqilqk 112


RESULT   2
AAB48078
ID   AAB48078 standard; protein; 121 AA.
XX
AC   AAB48078;
XX
DT   19-MAR-2001  (first entry)
XX
DE   Human extracellular signaling molecule (EXCS) (ID 1440015CD1).
XX
KW   Extracellular signaling molecule; EXCS; anti-inflammatory; human;
KW   immunosuppressive; cytostatic; neuroprotective; gastrointestinal;
KW   virucide; antibacterial; anti-HIV; human immunodeficiency virus;
KW   antiinfertility; cerebroprotective; nootropic; antiulcer; antifungal;
KW   anticonvulsant; tranquilizer; neuroleptic; vasotropic; gynecological;
KW   keratolytic; protozoacide; gene therapy.
XX
OS   Homo sapiens.
XX
PN   WO200070049-A2.
XX
PD   23-NOV-2000.
XX
PF   19-MAY-2000; 2000WO-US13975.
XX
PR   19-MAY-1999;   99US-0134949.
PR   15-JUL-1999;   99US-0144270.
PR   30-JUL-1999;   99US-0146700.
PR   04-OCT-1999;   99US-0157508.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Tang YT,  Yue H,  Lal P,  Burford N,  Bandman O,  Baughn MR;
PI   Azimzai Y,  Lu DAM,  Patterson C;
XX
DR   WPI; 2001-025021/03.
DR   N-PSDB; AAC84314.
XX
PT   New human extracellular signaling nucleic acids and polypeptides useful
PT   for diagnosing, treating and preventing infections and
PT   gastrointestinal, neurological, reproductive, and
PT   autoimmune/inflammatory disorders -
XX
PS   Claim 1; Page 97; 114pp; English.
XX
CC   The invention provides human extracellular signaling molecules (EXCS)
CC   and polynucleotides which identify and encode EXCS. EXCS can be
CC   expressed by standard recombinant methodology. The amino acid and nucleic
CC   acid sequences of EXCS are useful for diagnosing, treating and
CC   preventing infections and gastrointestinal (peptic ulcer, dysphagia,
CC   pancreatitis), neurological (e.g. epilepsy, ischemic cerebrovascular
CC   disease, stroke), reproductive (infertility, ovulatory defects,
CC   endometriosis), autoimmune /inflammatory (actinic keratosis, acquired
CC   immunodeficiency syndrome (AIDS), Addison's disease), and cell
CC   proliferative disorders including cancers (of the breast, adrenal gland,
CC   bone). They may also be used to treat fatal familial insomnia,
CC   nutritional and metabolic diseases of the nervous system, myopathies,
CC   mental disorders (anxiety, schizophrenia, mood), as well as infections
CC   caused by parasites (malaria, leishmania, trypanosoma), viral
CC   (adenovirus, coronavirus, flavivirus), bacterial (e.g. pneumococcus,
CC   staphylococcus, bacillus), and fungal (aspergillus, blastomyces,
CC   dermatophytes) agents. The nucleic acids, polypeptides, antagonists,
CC   agonists, pharmaceutical compositions, and antibodies may also be used
CC   for treating or preventing disorders associated with increased or
CC   decreased expression or activity of EXCS. EXCS polynucleotides may also
CC   be used to detect and quantify gene expression in biopsied tissues in
CC   which expression of EXCS may be correlated with the disease, to determine
CC   presence or excess expression of EXCS, to monitor regulation of EXCS
CC   levels during therapeutic intervention, to detect the presence of
CC   associated disorders, as targets in microarray, to generate hybridization
CC   probes, and to detect differences in gene sequences among normal, carrier
CC   or affected individuals. Antibodies may also be used in diagnosing
CC   disorders, in monitoring patients being treated with EXCS agonists,
CC   antagonists or inhibitors. Sequences AAB48057-B48082 represent the EXCS
CC   of the invention.
XX
SQ   Sequence   121 AA;


  Query Match             80.8%;  Score 459;  DB 22;  Length 121;
  Best Local Similarity   83.0%;  Pred. No. 2.3e-44;
  Matches   93;  Conservative    3;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       1 MFGSLLHFALLAAGVVPLSWDLPEPRSRASKIRVHSRGKLWAIGHFMGKKSLEPSSPSPL 60
           |||||| |||||||| |||||||||||||||||||| ||| ||||||||||||||||
Db      10 mfgsllfallaagvaplswdlpeprsraskirvhsrgnlwatghfmgkkslepsspspl 69

Qy      61 GTAPHTSLRDQRLQLSHDLLGILLLKKALGVSLSRPAPQIQYRRLLVQILQK 112
           |||||||||||||||||||||||||||||| : | |:       : |||
Db      70 gtaphtslrdqrlqlshdllgilllkkalgvssaaphpksstggcwykylqk 121


RESULT   3
AAW64915
ID   AAW64915 standard; peptide; 32 AA.
XX
AC   AAW64915;
XX
DT   06-JUL-1999  (first entry)
XX
```

DE Neuromedin B peptide having chlorambucil on the N-terminal.
XX
KW Neuromedin; chlorambucil; peptic ulcer; pancreatitis;
KW eating disorder; diabetes; acromegaly; enterocutaneous fistula;
KW psoriasis; growth retardation; gastrointestinal motility disorder;
KW antitumour.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "The amino terminal is acylated by a
FT chlorambucil residue"
FT Modified-site 32
FT /note= "Met-NH2"
XX
PN WO9500542-A1.
XX
PD 05-JAN-1995.
XX
PF 15-JUN-1994; 94WO-US06757.
XX
PR 17-DEC-1993; 93US-0168390.
PR 18-JUN-1993; 93US-0078062.
XX
PA (PEPT-) PEPTIDE TECHNOLOGIES CORP.
XX
PI Chandrasekhar B, Knight M, Takahashi K;
XX
DR WPI; 1995-052004/07.
XX
PT New bombesin, gastrin releasing peptide or Neuromedin B or C derivs.
PT - antagonists for treating conditions such as gastrointestinal
PT disorders, psoriasis and cancers
XX
PS Claim 1; Page 36; 45pp; English.
XX
CC The patent discloses (1) the peptide sequence of bombesin (BBN),
CC gastrin releasing peptide (GRP), Neuromedin B or Neuromedin C,
CC the peptide sequence having a chlorambucil group attached to the
CC amino terminal; (2) a BBN receptor antagonist of formula
CC R4-His-Trp-Ala-R1-R2-His-R3-CO-CH2CH3; and (3) a BBN receptor
CC antagonist of formula R4-Asn-R5-Trp-Ala-Val-R2-His-Leu-CO-CH2CH3.
CC In these formulae, R1 = Val or Thr; R2 = Gly or D-Ala; R3 = Leu or
CC Phe; R4 = N-acetyl, bromoacetyl, chloroacetyl, [bis(2-chloroethyl)-
CC amino]-L-phenylalanine or a chlorambucil group; and R5 = Gln or His.
CC The compounds act as potent BBN/GRP-like peptide antagonists. They
CC can be used to inhibit the growth of cells that are sensitive to the
CC growth-promoting effects of BBN, GRP or a related peptide such as
CC pancreatic cells, gastric cells, neurons, hypothalamic cells and
CC cancerous cells or tumours. They can also be used to inhibit the
CC binding of BBN, GRP or a related peptide to cells capable of such
CC binding. They can be used for treating e.g. peptic ulcer, pancreatitis,
CC eating disorders, diabetes, acromegaly, enterocutaneous fistula,
CC psoriasis, growth retardation, gastrointestinal motility disorders or
CC tumours. The terminal structures of the compounds protect them from
CC in vivo proteolysis and provide highly potent antagonist effects that
CC persist for extended periods of time upon administration.
XX
SQ Sequence 32 AA;

Query Match 28.3%; Score 161; DB 16; Length 32;
Best Local Similarity 93.5%; Pred. No. 3.1e-11;
Matches 29; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 17 PLSWDLPEPRSRASKIRVHSRGKLWAIGHFM 47
||||||||||||||||||||||| ||| ||||
Db 2 plswdlpeprsraskirvhsrgnlwatghfm 32

RESULT 4
AAB91375
ID AAB91375 standard; Peptide; 32 AA.
XX
AC AAB91375;
XX
DT 22-JUN-2001 (first entry)
XX
DE Tachykinins peptide SEQ ID NO:551.
XX
KW Protection; endogenous therapeutic peptide; peptidase; conjugation;
KW blood component; modification; succinimidyl; maleimido group; amino;
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200069900-A2.
XX
PD 23-NOV-2000.
XX
PF 17-MAY-2000; 2000WO-US13576.
XX
PR 17-MAY-1999; 99US-0134406.
PR 10-SEP-1999; 99US-0153406.
PR 15-OCT-1999; 99US-0159783.
XX
PA (CONJ-) CONJUCHEM INC.
XX
PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;
XX
DR WPI; 2001-112059/12.
XX
PT Modifying and attaching therapeutic peptides to albumin prevents
PT peptidase degradation, useful for increasing length of in vivo activity
PT -
XX
PS Disclosure; Page 380; 733pp; English.
XX
CC The present invention describes a modified therapeutic peptide (I)
CC comprising a therapeutically active amino acid region (III) and a
CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to
CC a less therapeutically active amino acid region (IV), which covalently
CC bonds with amino/hydroxyl/thiol groups on blood components to form a
CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth
CC factors and neurotransmitters, to protect them from peptidase activity
CC in vivo for the treatment of various disorders. Endogenous therapeutic
CC peptides are not suitable as drug candidates as they require frequent
CC administration due to rapid degradation by peptidases in the body.
CC Modifying and attaching therapeutic peptides to albumin prevents or
CC reduces the action of peptidases to increase length of activity (half
CC life) and specificity as bonding to large molecules decreases
CC intracellular uptake and interference with physiological processes.
CC AAB90829 to AAB92441 represent peptides which can be used in the
CC exemplification of the present invention.
XX
SQ Sequence 32 AA;

Query Match 26.8%; Score 152; DB 22; Length 32;
Best Local Similarity 87.1%; Pred. No. 3.2e-10;
Matches 27; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 17 PLSWDLPEPRSRASKIRVHSRGKLWAIGHFM 47
||||||||||||| ||||| || ||| ||||
Db 2 plswdlpeprsragkirvhprgnlwatghfm 32

RESULT 5
AAB91374
ID AAB91374 standard; Peptide; 30 AA.
XX
AC AAB91374;
XX

```
DT   22-JUN-2001  (first entry)
XX
DE   Tachykinins peptide SEQ ID NO:550.
XX
KW   Protection; endogenous therapeutic peptide; peptidase; conjugation;
KW   blood component; modification; succinimidyl; maleimido group; amino;
KW   hydroxyl; thiol; hormone; growth factor; neurotransmitter.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200069900-A2.
XX
PD   23-NOV-2000.
XX
PF   17-MAY-2000; 2000WO-US13576.
XX
PR   17-MAY-1999;   99US-0134406.
PR   10-SEP-1999;   99US-0153406.
PR   15-OCT-1999;   99US-0159783.
XX
PA   (CONJ-) CONJUCHEM INC.
XX
PI   Bridon DP,  Ezrin AM,  Milner PG,  Holmes DL,  Thibaudeau K;
XX
DR   WPI; 2001-112059/12.
XX
PT   Modifying and attaching therapeutic peptides to albumin prevents
PT   peptidase degradation, useful for increasing length of in vivo activity
PT   -
XX
PS   Disclosure; Page 380; 733pp; English.
XX
CC   The present invention describes a modified therapeutic peptide (I)
CC   comprising a therapeutically active amino acid region (III) and a
CC   reactive group (II) (e.g. succinimidyl and maleimido groups) attached to
CC   a less therapeutically active amino acid region (IV), which covalently
CC   bonds with amino/hydroxyl/thiol groups on blood components to form a
CC   peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
CC   (I) are useful for modifying therapeutic peptides e.g. hormones, growth
CC   factors and neurotransmitters, to protect them from peptidase activity
CC   in vivo for the treatment of various disorders. Endogenous therapeutic
CC   peptides are not suitable as drug candidates as they require frequent
CC   administration due to rapid degradation by peptidases in the body.
CC   Modifying and attaching therapeutic peptides to albumin prevents or
CC   reduces the action of peptidases to increase length of activity (half
CC   life) and specificity as bonding to large molecules decreases
CC   intracellular uptake and interference with physiological processes.
CC   AAB90829 to AAB92441 represent peptides which can be used in the
CC   exemplification of the present invention.
XX
SQ   Sequence   30 AA;


  Query Match             25.5%;  Score 145;  DB 22;  Length 30;
  Best Local Similarity   86.7%;  Pred. No. 1.9e-09;
  Matches   26;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy      18 LSWDLPEPRSRASKIRVHSRGKLWAIGHFM 47
           |||||||||||| ||||| || ||| ||||
Db       1 lswdlpeprsragkirvhprgnlwatghfm 30


RESULT   6
AAU43382
ID   AAU43382 standard; Protein; 190 AA.
XX
AC   AAU43382;
XX
DT   27-FEB-2002  (first entry)
XX
DE   Propionibacterium acnes immunogenic protein #4278.
XX
KW   SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis;
KW   uveitis; endophthalmitis; bone; joint; central nervous system; ELISA;
KW   inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;
KW   dermatological; osteopathic; neuroprotectant.
XX
OS   Propionibacterium acnes.
XX
PN   WO200181581-A2.
XX
PD   01-NOV-2001.
XX
PF   20-APR-2001; 2001WO-US12865.
XX
PR   21-APR-2000; 2000US-199047P.
PR   02-JUN-2000; 2000US-208841P.
PR   07-JUL-2000; 2000US-216747P.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Skeiky YAW,  Persing DH,  Mitcham JL,  Wang SS,  Bhatia A;
PI   L'maisonneuve J,  Zhang Y,  Jen S,  Carter D;
XX
DR   WPI; 2001-616774/71.
DR   N-PSDB; AAS59520.
XX
PT   Propionibacterium acnes polypeptides and nucleic acids useful for
PT   vaccinating against and diagnosing infections, especially useful for
PT   treating acne vulgaris -
XX
PS   Example 1; SEQ ID No 4577; 1069pp; English.
XX
CC   Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic
CC   polypeptides. The proteins and their associated DNA sequences are used in
CC   the treatment, prevention and diagnosis of medical conditions caused by
CC   P. acnes. The disorders include SAPHO syndrome (synovitis, acne,
CC   pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis.
CC   P. acnes is also involved in infections of bone, joints and the central
CC   nervous system, however it is particularly involved in the inflammatory
CC   lesions associated with acne vulgaris. A method for detecting the
CC   presence or absence of P. acnes in a patient comprises contacting a
CC   sample with a binding agent that binds to the proteins of the invention
CC   and determining the amount of bound protein in the sample. The
CC   polypeptides may be used as antigens in the production of antibodies
CC   specific for P. acnes proteins. These antibodies can be used to
CC   downregulate expression and activity of P. acnes polypeptides and
CC   therefore treat P. acnes infections. The antibodies may also be used as
CC   diagnostic agents for determining P. acnes presence, for example, by
CC   enzyme linked immunosorbent assay (ELISA).
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence   190 AA;


  Query Match             14.3%;  Score 81;  DB 22;  Length 190;
  Best Local Similarity   32.5%;  Pred. No. 0.33;
  Matches   26;  Conservative   14;  Mismatches   20;  Indels   20;  Gaps    4;

Qy      10 LLAAGVVP--------LSWDLPEPR---SRASKIRVHSRGKLWAIGHFMGKKSL---EPS 55
           :||| :||         ::  :  ||   ||||  |  :    ||:|  :  :||   | :
Db     101 ilaatmvpahmvhgskvttrvqsprrqpsrasaarrmastsawavgspvrsrslpasert 160

Qy      56 SP-----SPLGTAPHTSLR 69
           ||      :|:||:|| : |
Db     161 splapritapmgtsphvaar 180


RESULT   7
AAR74034
ID   AAR74034 standard; Protein; 119 AA.
XX
AC   AAR74034;
```

```
XX
DT   19-DEC-1995  (first entry)
XX
DE   Bombesin-related peptide.
XX
KW   Bombesin; frog; PCR; primer; amplification; probe; prohormone; human;
KW   veterinary medicine.
XX
OS   Bombina orientalis.
XX
FH   Key             Location/Qualifiers
FT   Cleavage-site   43
FT                   /note= "prohormone processing site"
FT   Cleavage-site   47
FT                   /note= "prohormone processing site"
FT   Cleavage-site   60
FT                   /note= "prohormone processing site"
FT   Peptide         45..59
FT                   /note= "SAP bombesin-14, peptide of claim 1"
FT   Peptide         49..59
FT                   /note= "SAP bombesin-10, peptide of claim 2"
XX
PN   US5410018-A.
XX
PD   25-APR-1995.
XX
PF   25-FEB-1994;   94US-0203196.
XX
PR   25-FEB-1994;   94US-0203196.
XX
PA   (OREG-) OREGON REGIONAL PRIMATE RES CENT.
XX
PI   Barry B,  Nagalla S,  Spindel ER;
XX
DR   WPI; 1995-169632/22.
DR   N-PSDB; AAQ92003.
XX
PT   Purified bombesin-related peptide(s) - prepared by recombinant DNA
PT   methods
XX
PS   Disclosure; Fig 1; 10pp; English.
XX
CC   The amino acid sequence of a bombesin-related peptide designated
CC   SAP-bombesin.  The DNA sequence was isolated from frog tissues using the
CC   PCR primers AAQ87998-9 and probe AAQ88000.  The peptides AAR74032-3
CC   (residues 45-59 and 49-59 of the protein) are derived from the prohormone
CC   by processing at the Ser-Leu and Lys-Lys residue sequences.  The
CC   peptides have applications within human and veterinary medicine,
CC   especially to treat the diseases or disorders specified in US5217955,
CC   WO9402018 and WO9220363.
XX
SQ   Sequence   119 AA;


  Query Match             13.5%;  Score 76.5;  DB 16;  Length 119;
  Best Local Similarity   30.3%;  Pred. No. 0.6;
  Matches   23;  Conservative   13;  Mismatches   35;  Indels    5;  Gaps    2;

Qy       3 GSLLHFALLAAGVVPLSWDL---PEPRSRASKIRVHSRGKLWAIGHFMGKKSLEPSSPSP 59
           | | |  ||    : ||  :    :| ::       | |  || |||||||||: ::
Db      13 gflfh--llifsfialsscmefvedpnnqgglslqqslgnqwarghfmgkkslqdtnfqe 70

Qy      60 LGTAPHTSLRDQRLQL 75
           : :    :: : |  |
Db      71 mesfakrnvenmraal 86


RESULT   8
ABG22331
ID   ABG22331 standard; Protein; 517 AA.
XX
AC   ABG22331;
XX
DT   18-FEB-2002  (first entry)
XX
DE   Novel human diagnostic protein #22322.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   N-PSDB; AAS86518.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 20; SEQ ID No 52690; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. ABG00010-ABG30377 represent novel human
CC   diagnostic amino acid sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence   517 AA;


  Query Match             13.3%;  Score 75.5;  DB 22;  Length 517;
  Best Local Similarity   29.0%;  Pred. No. 4.7;
  Matches   29;  Conservative   18;  Mismatches   30;  Indels   23;  Gaps    5;

Qy       7 HFALLAAGVVPLSWDLPEPRSRASKIRVHSRGKLWAIGHFMGKKSLEPSSPSPLGTAPHT 66
           |  :   |:|| |    ||||| : : : | |       |   : : |:: | :|
Db     186 hiliatggmvp-stphxeprsrgaslxitsdg------ffqleeivpaaaslvga---- 233

Qy      67 SLRDQRLQLSHDLLGILLLKKALGVSLSRPAPQIQYRRLL 106
                || || :: |||    |||   |: :  |:: ::|
Db     234 -----rlplsvemagil---salg---sktslmirhdkvl 262


RESULT   9
AAR88502
ID   AAR88502 standard; Protein; 473 AA.
```

```
XX
AC   AAR88502;
XX
DT   10-JUL-1996  (first entry)
XX
DE   Protein sequence for mediating male fertility in plants.
XX
KW   Male fertility; plant; microsporogenesis; tassel development; MS45;
KW   maize; sterile; fertile; transformed plant; female parent;
KW   hybrid seed.
XX
OS   Zea mays.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 422
FT                   /note= "Encoded by TAA"
FT   Misc-difference 424
FT                   /note= "Encoded by TGA"
FT   Misc-difference 438
FT                   /note= "Encoded by TAA"
XX
PN   US5478369-A.
XX
PD   26-DEC-1995.
XX
PF   12-JUN-1990;   90US-0537183.
XX
PR   02-AUG-1993;   93US-0103739.
PR   12-JUN-1990;   90US-0537183.
PR   28-OCT-1994;   94WO-US12444.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
XX
PI   Albertsen MC,  Beach LR,  Howard J,  Huffman GA;
XX
DR   WPI; 1996-057646/06.
DR   N-PSDB; AAT10928.
XX
PT   Nucleic acid encoding a protein critical for male fertility in
PT   plants - used to produce plants, esp. maize, that are normally male
PT   sterile but can be induced to fertility, esp. for use in hybrid seed
PT   prodn
XX
PS   Claim 1; Column 23-24; 27pp; English.
XX
CC   This sequence represents a protein sequence which mediates male
CC   fertility in plants.  This sequence is responsible for one of the
CC   steps in microsporogenesis, specifically tassel development.  The
CC   cDNA encoding this protein was isolated from a tassel derived cDNA
CC   and was named MS45.  The introduction of this cDNA into a plant, pref.
CC   maize, which is normally male sterile causes it to be fertile.  Such
CC   transformed plants may be used as female parents in the production of
CC   hybrid seeds.
XX
SQ   Sequence   473 AA;


  Query Match           12.9%;  Score 73.5;  DB 17;  Length 473;
  Best Local Similarity   29.2%;  Pred. No. 7.1;
  Matches   28;  Conservative   11;  Mismatches   24;  Indels   33;  Gaps    5;

Qy       1 MFGSLLHFALLAA---GVVPL-------------------SWDLPEPRSRASKIRVHSR 37
           :| : |  ||| |   |: ||                    ||    ||  ||::|   |
Db      30 lffaalalallvadpfglsplaevdyrpvkhelapygevmgsw----prdnasrlr---r 82

Qy      38 GKLWAIGHFMGKKSLEPSSPSPLGTAPHTSLRDQRL 73
           |:|  :|   | :|:|       |  |:  | | |:
Db      83 grlefvgevfgpesiefdlq---grgpyagladgrv 115


RESULT  10
AAW77413
ID   AAW77413 standard; Protein; 473 AA.
XX
AC   AAW77413;
XX
DT   24-DEC-1998  (first entry)
XX
DE   Maize male fertility protein MS45.
XX
KW   Maize; male fertility gene; MS45; transgenic plant; hybrid seed.
XX
OS   Zea mays.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 422
FT                   /note= "Xaa is unspecified"
FT   Misc-difference 424
FT                   /note= "Xaa is unspecified"
FT   Misc-difference 438
FT                   /note= "Xaa is unspecified"
XX
PN   US5824524-A.
XX
PD   20-OCT-1998.
XX
PF   07-JUN-1995;   90US-0474404.
XX
PR   02-AUG-1993;   93US-0103739.
PR   12-JUN-1990;   90US-0537183.
PR   07-JUN-1995;   95US-0474404.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
XX
PI   Albertsen MC,  Beach LR,  Howard J,  Huffman GA;
XX
DR   WPI; 1998-582558/49.
DR   N-PSDB; AAV62709.
XX
PT   Production of male-sterile plants - by repressing expression of male
PT   fertility gene
XX
PS   Claim 1; Column 39-42; 40pp; English.
XX
CC   The maize male fertility gene MS45 can be repressed as a method for
CC   mediating male fertility in a plant.  This method can be used especially
CC   for producing hybrid maize seed.  The endogenous gene can be inactivated
CC   and the control of an inducible promoter can be used to specifically
CC   activate the gene when fertile plants are desired.
XX
SQ   Sequence   473 AA;


  Query Match           12.9%;  Score 73.5;  DB 19;  Length 473;
  Best Local Similarity   29.2%;  Pred. No. 7.1;
  Matches   28;  Conservative   11;  Mismatches   24;  Indels   33;  Gaps    5;

Qy       1 MFGSLLHFALLAA---GVVPL-------------------SWDLPEPRSRASKIRVHSR 37
           :| : |  ||| |   |: ||                    ||    ||  ||::|   |
Db      30 lffaalalallvadpfglsplaevdyrpvkhelapygevmgsw----prdnasrlr---r 82

Qy      38 GKLWAIGHFMGKKSLEPSSPSPLGTAPHTSLRDQRL 73
           |:|  :|   | :|:|       |  |:  | | |:
Db      83 grlefvgevfgpesiefdlq---grgpyagladgrv 115


RESULT  11
AAW30612
ID   AAW30612 standard; Protein; 473 AA.
XX
AC   AAW30612;
XX
DT   30-MAR-1999  (first entry)
XX
DE   Zea mays male fertility MS45 protein.
XX
```

```
KW   Zea mays; maize; male fertility; MS45; sterile plant; hybrid strain;
KW   breeding.
XX
OS   Zea mays.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 422
FT                   /label= unknown
FT                   /note= "encoded by TAA (a stop codon)"
FT   Misc-difference 424
FT                   /label= unknown
FT                   /note= "encoded by TGA (a stop codon)"
FT   Misc-difference 438
FT                   /label= unknown
FT                   /note= "encoded by TAA (a stop codon)"
XX
PN   US5859341-A.
XX
PD   12-JAN-1999.
XX
PF   07-JUN-1995;   95US-0482714.
XX
PR   02-AUG-1993;   93US-0103739.
PR   12-JUN-1990;   90US-0537183.
PR   07-JUN-1995;   95US-0482714.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
XX
PI   Albertsen MC,  Beach LR,  Howard J,  Huffman GA;
XX
DR   WPI; 1999-120032/10.
DR   N-PSDB; AAX00482.
XX
PT   Constitutively male sterile plants - with inducible male fertility,
PT   useful in hybrid breeding
XX
PS   Example 1; Column 33-36; 36pp; English.
XX
CC   A method has been developed of providing heritable, externally
CC   controlled male fertility in plants. The method comprises: (a) cloning a
CC   gene (I) that encodes a product (II) essential for microsporogenesis;
CC   (b) linking (I) to an expression control sequence that includes an
CC   inducible promoter, responsive to external controls; (c) rendering
CC   inoperative the native gene that encodes (II); and (d) inserting the
CC   (I)-containing expression sequence into the nuclear genome to produce a
CC   plant that is constitutively sterile but controllably male fertile. Also
CC   described in the present invention are controllably male fertile plants
CC   produced by the above method, their parts, cells, and seeds (and any
CC   plants grown from these seeds, their parts and cells), and hybrid seeds
CC   produced using these plants. The method produces plants that are useful
CC   in breeding hybrid strains. The rendering of constitutively sterile
CC   plants fertile can tolerate 70-80% failure of induction without a
CC   significant reduction in seed yield (considerably higher than known
CC   methods based on rendering constitutively fertile plants sterile), no
CC   manual removal of tassels (from maize plants) is required, and no
CC   treatment with chemicals is needed during hybrid development. The
CC   present sequence represents the MS45 protein isolated from Zea mays in
CC   an example from the present invention.
XX
SQ   Sequence   473 AA;


  Query Match             12.9%;  Score 73.5;  DB 20;  Length 473;
  Best Local Similarity   29.2%;  Pred. No. 7.1;
  Matches   28;  Conservative   11;  Mismatches   24;  Indels   33;  Gaps    5;

Qy       1 MFGSLLHFALLAA---GVVPL-------------------SWDLPEPRSRASKIRVHSR 37
           :| : |  ||| |   |: ||                   ||    ||  ||::|   |
Db      30 lffaalalallvadpfglsplaevdyrpvkhelapygevmgsw----prdnasrlr---r 82

Qy      38 GKLWAIGHFMGKKSLEPSSPSPLGTAPHTSLRDQRL 73
           |:|  :|   | :|:|       |  |:  | | |:
Db      83 grlefvgevfgpesiefdlq---grgpyagladgrv 115
```

```
RESULT  12
AAW90062
ID   AAW90062 standard; Protein; 473 AA.
XX
AC   AAW90062;
XX
DT   04-MAR-1999  (first entry)
XX
DE   Maize MS45 protein.
XX
KW   Corn; MS45; plant; fertility; gene inactivation; inducible promoter.
XX
OS   Zea mays.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 422
FT                   /label= unknown
FT   Misc-difference 424
FT                   /label= unknown
FT   Misc-difference 438
FT                   /label= unknown
XX
PN   US5850014-A.
XX
PD   15-DEC-1998.
XX
PF   07-JUN-1995;   95US-0485845.
XX
PR   02-AUG-1993;   93US-0103739.
PR   12-JUN-1990;   90US-0537183.
PR   07-JUN-1995;   95US-0485845.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
XX
PI   Albertsen MC,  Beach LR,  Howard J,  Huffman GA;
XX
DR   WPI; 1999-094416/08.
DR   N-PSDB; AAV73926.
XX
PT   Non-maize plant containing defined cDNA sequence - and plant
PT   containing defined amino acid sequence
XX
PS   Claim 2; Column 33-36; 35pp; English.
XX
CC   This sequence represents the maize MS45 protein. This protein is used in
CC   a method in which the fertility of a plant is controlled by inactivating
CC   a gene critical to fertility and inserting into the plant the critical
CC   gene linked to an inducible promoter.
XX
SQ   Sequence   473 AA;


  Query Match             12.9%;  Score 73.5;  DB 20;  Length 473;
  Best Local Similarity   29.2%;  Pred. No. 7.1;
  Matches   28;  Conservative   11;  Mismatches   24;  Indels   33;  Gaps    5;

Qy       1 MFGSLLHFALLAA---GVVPL-------------------SWDLPEPRSRASKIRVHSR 37
           :| : |  ||| |   |: ||                   ||    ||  ||::|   |
Db      30 lffaalalallvadpfglsplaevdyrpvkhelapygevmgsw----prdnasrlr---r 82

Qy      38 GKLWAIGHFMGKKSLEPSSPSPLGTAPHTSLRDQRL 73
           |:|  :|   | :|:|       |  |:  | | |:
Db      83 grlefvgevfgpesiefdlq---grgpyagladgrv 115


RESULT  13
AAG67264
ID   AAG67264 standard; Protein; 473 AA.
XX
AC   AAG67264;
XX
```

```
DT   13-NOV-2001  (first entry)
XX
DE   Amino acid sequence of MS45, a plant male fertility gene.
XX
KW   MS45; male fertility gene; sterile plant; fertility.
XX
OS   Zea mays.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 422
FT                   /note= "encoded by a stop codon"
FT   Misc-difference 424
FT                   /note= "encoded by a stop codon"
FT   Misc-difference 438
FT                   /note= "encoded by a stop codon"
XX
PN   US6265640-B1.
XX
PD   24-JUL-2001.
XX
PF   10-DEC-1998;   98US-0211416.
XX
PR   09-MAR-1992;   92US-0848433.
PR   02-AUG-1993;   93US-0103739.
PR   07-JUN-1995;   95US-0485845.
PR   12-JUN-1990;   90US-0537183.
PR   21-DEC-1993;   93US-0171302.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
XX
PI   Albertsen MC,  Beach LR,  Howard J,  Huffman GA;
XX
DR   WPI; 2001-463948/50.
DR   N-PSDB; AAH77827.
XX
PT   Nucleotide sequences useful for producing plants with inducible
PT   fertility/sterility -
XX
PS   Disclosure; Column 33-36; 34pp; English.
XX
CC   The present sequence represents MS45. MS45 is a plant male fertility
CC   gene. Genomic MS45 comprises at least 2 introns of 100-130 base pairs
CC   (bp) in length. The MS45 nucleotide sequence may be used to control
CC   plant fertility through the production of a constitutively sterile plant
CC   in which fertility may be induced. The plants are rendered controllably
CC   sterile by using an inducible promoter to regulate expression of the
CC   DNA molecule so that the gene is normally 'off' and the plant is
CC   therefore sterile. When the promoter is induced, the plant becomes
CC   fertile.
XX
SQ   Sequence   473 AA;


  Query Match             12.9%;  Score 73.5;  DB 22;  Length 473;
  Best Local Similarity   29.2%;  Pred. No. 7.1;
  Matches   28;  Conservative   11;  Mismatches   24;  Indels   33;  Gaps    5;

Qy       1 MFGSLLHFALLAA---GVVPL-------------------SWDLPEPRSRASKIRVHSR 37
           :| : |  ||| |   |: ||                    ||    ||  ||::|   |
Db      30 iffaalalallvadpfglsplaevdyrpvkhelapygevmgsw----prdnasrlr---r 82

Qy      38 GKLWAIGHFMGKKSLEPSSPSPLGTAPHTSLRDQRL 73
             |:|  :|   | :|:|       |  |:  | | |:
Db      83 grlefvgevfgpesiefdlq---grgpyagladgrv 115


RESULT  14
ABG29063
ID   ABG29063 standard; Protein; 969 AA.
XX
AC   ABG29063;
XX
DT   18-FEB-2002  (first entry)
XX
DE   Novel human diagnostic protein #29054.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   N-PSDB; AAS93250.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 20; SEQ ID No 59422; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. ABG00010-ABG30377 represent novel human
CC   diagnostic amino acid sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence   969 AA;


  Query Match             12.9%;  Score 73.5;  DB 22;  Length 969;
  Best Local Similarity   27.1%;  Pred. No. 17;
  Matches   26;  Conservative   13;  Mismatches   34;  Indels   23;  Gaps    4;

Qy      15 VVPLSWDLPEPR-----------SRASKIRVHSRGKLWAIGHFMGKKSLEPSSPSPLGTA 63
           ::|  :|:|| |           ||   : : ::| |: : |      :  ||    |
Db     442 mmpkrfdipeqrmgktgrahrkksrtgdltl-tkgalyqlshistlnlmpgssllshget 500

Qy      64 PHTSLRDQRLQLSHDLLGILLLKKALGVS-LSRPAP 98
           ||           |   |: ||  | | : || |||
Db     501 ph----------yhrrygvsllssawgaaplsspap 526


RESULT  15
AAM85555
ID   AAM85555 standard; Protein; 148 AA.
XX
```

AC AAM85555;
XX
DT 07-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen SEQ ID NO:13148.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US01354.
XX
PR 31-JAN-2000; 2000US-0179065.
PR 04-FEB-2000; 2000US-0180628.
PR 24-FEB-2000; 2000US-0184664.
PR 02-MAR-2000; 2000US-0186350.
PR 16-MAR-2000; 2000US-0189874.
PR 17-MAR-2000; 2000US-0190076.
PR 18-APR-2000; 2000US-0198123.
PR 19-MAY-2000; 2000US-0205515.
PR 07-JUN-2000; 2000US-0209467.
PR 28-JUN-2000; 2000US-0214886.
PR 30-JUN-2000; 2000US-0215135.
PR 07-JUL-2000; 2000US-0216647.
PR 07-JUL-2000; 2000US-0216880.
PR 11-JUL-2000; 2000US-0217487.
PR 11-JUL-2000; 2000US-0217496.
PR 14-JUL-2000; 2000US-0218290.
PR 26-JUL-2000; 2000US-0220963.
PR 26-JUL-2000; 2000US-0220964.
PR 14-AUG-2000; 2000US-0224518.
PR 14-AUG-2000; 2000US-0224519.
PR 14-AUG-2000; 2000US-0225213.
PR 14-AUG-2000; 2000US-0225214.
PR 14-AUG-2000; 2000US-0225266.
PR 14-AUG-2000; 2000US-0225267.
PR 14-AUG-2000; 2000US-0225268.
PR 14-AUG-2000; 2000US-0225270.
PR 14-AUG-2000; 2000US-0225447.
PR 14-AUG-2000; 2000US-0225757.
PR 14-AUG-2000; 2000US-0225758.
PR 14-AUG-2000; 2000US-0225759.
PR 18-AUG-2000; 2000US-0226279.
PR 22-AUG-2000; 2000US-0226681.
PR 22-AUG-2000; 2000US-0226868.
PR 22-AUG-2000; 2000US-0227182.
PR 23-AUG-2000; 2000US-0227009.
PR 30-AUG-2000; 2000US-0228924.
PR 01-SEP-2000; 2000US-0229287.
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XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
DR N-PSDB; AAK58336.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and
PT metastasis -
XX
PS Claim 11; SEQ ID NO 13148; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting
CC the nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention.
XX
SQ Sequence 148 AA;

Query Match 12.8%; Score 72.5; DB 22; Length 148;
Best Local Similarity 28.0%; Pred. No. 2.2;
Matches 30; Conservative 12; Mismatches 50; Indels 15; Gaps 3;

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Qy      62 TAPHTSLRDQRLQLSHDLLGILLLKKALGVSLSRPAPQIQYRRLLVQ 108
              :|  ||: : : |:   :|   |:|    |  ||: :: | ||  |
Db      86 ksplkslklkgisltlgyvgrgslrktshaseqrps-evtyarlktq 131
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